



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,756	10/10/2001	Yelena Loginova	967.061US1	2366
21186 7590 02/18/2010 SCHWEGMAN, LUNDBERG & WOESSNER, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402				
EXAMINER				
HUI, SAN MING R				
ART UNIT		PAPER NUMBER		
1628				
NOTIFICATION DATE		DELIVERY MODE		
02/18/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

[uspto@slwip.com](mailto:uspto@slwip.com)  
[request@slwip.com](mailto:request@slwip.com)

**Office Action Summary****Application No.**

09/975,756

**Applicant(s)**

LOGINOVA ET AL.

**Examiner**

San-ming Hui

**Art Unit**

1628

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 7, 9-12 and 14-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7, 9-12 and 14-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SD/C)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 1/5/10

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/5/2010 has been entered.

Claims 27-30 have been added. Claims 1-3, 7, 9-12, and 14-30 are pending.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3, 7, 9-12, and 14-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,653,969 ('969) in view of US 5,804,173 ('173) and EP 0 590 604 ('604), both '173 and '604 are of record.

'969 teaches a low residue, rinse-off hair care product, such as gel, containing copolymer of methyl methacrylate and ethyl acrylate (See col. 7, lines 44 and col.10, line 39). '969 teaches the A monomer unit can be present in a range of 50-85% and monomer B as 15-40% (See col. 6, second to last paragraph and col. 8, first paragraph). Hydrocarbon such as isoparaffin is taught as useful as solvent (See col. 12, lines 9-14 for example). '969 also teaches that Ceteareth-20, dimethicone, isododecane can be used (See col. 25-28, Examples 3-10).

'969 does not expressly teach the surfactant as ethoxylated alcohol. '969 does not expressly teach the additional agent such as sunscreen is added into the low-residue hair product. '969 does not expressly teach the herein claimed ratio between the monomer unit of acrylate copolymer as 7.5-8.5 : 1.8-2.3.

'173 teaches a easy-off hair product that can incorporate the surfactant can be ethoxylated alcohols (See col. 25, lines 11-12). '173 teaches a mixture useful for cosmetic composition for hair and skin care comprising a copolymer and carriers. Carriers included isoparaffin and cyclomethicone. Solvents or carriers can be comprised in the hair care composition in a range of about 10-98% (See col. 15-16). '173 teaches the hair care products can be formulated into various known formulations such as gel (See col. 15-16). About 75% of isoparaffin and around 60% of cyclomethicone are used to dissolved the copolymer in examples 11 and 17, polymer-

solvent mixtures. '173 also teaches the herein claimed surfactants such as Steareth-20 and Ceteareth-20 (See col.25, lines 15-26). '173 also teaches the copolymer formulation may be used as a component for gels, lotions, and sunscreen (See col. 15, lines 48-67, col. 19, lines 48 – col. 20, line 27). '173 also teaches such composition having an improved "wash-out" characteristics.

'604 teaches a hairspray product that employing co-polymer of alkyl acrylate (including ethyl acrylate) with alkyl methacrylate (including methyl methacrylate), in a ratio of about 7.5 to 2.5 (See page 2, lines 40-45).

It would have been obvious to one of ordinary skill in the art at the time of invention to employ the ethoxylated alcohol surfactant and sunscreen agent taught in '173 into the hair composition of '969. It would have been obvious to one of ordinary skill in the art at the time of invention to employ the herein claimed ratio of monomers in the hair product of '969.

One of ordinary skill in the art would have been motivated to employ the ethoxylated alcohol surfactant and sunscreen agent taught in '173 into the hair composition of '969. It is clear that both of the easily rinse-off hair products of '969 and '173 are similar. Therefore, the surfactant and the sunscreen agents useful for hair composition of '173 should also be useful for hair composition of '969 since the employment of these agents would not affect the rinse-off properties of the hair product of '969. One of ordinary skill in the art would have been motivated to formulate and employ the herein claimed copolymer with the herein claimed weight ratio as 7.5-8.5 : 1.8-2.3 since the optimization of result effect parameters (dosage range, dosing

regimens) is obvious as being within the skill of the artisan, absent evidence to the contrary.

### ***Response to Arguments***

Applicant's arguments filed 1/5/2010 averring the cited prior art's failure to teach the range of the ratio of the monomers employed to form the herein claimed co-polymer have been fully considered but they are not persuasive. The examiner notes that a wide range of ratio has been employed in the herein claimed monomers that form the herein claimed co-polymer. Such co-polymer has been used in various hair care products, such as gel, spray, lotion. Possessing the teachings of the cited prior art, one of ordinary skill in the art would have been motivated to optimize the ratio of the monomers to arrive at the herein claimed invention.

Applicant's arguments filed 1/5/2010 averring the presence of the unexpected benefits have been considered, but are not found persuasive. The examiner notes that it is applicant's burden to demonstrate unexpected results over the prior art. See MPEP 716.02, also 716.02 (a) - (g). Furthermore, the unexpected results should be demonstrated with evidence that the differences in results are in fact unexpected and unobvious and of both statistical and practical significance. *Ex parte Gelles*, 22 USPQ2d 1318, 1319 (Bd. Pat. App. & Inter. 1992). Moreover, evidence as to any unexpected benefits must be "clear and convincing" *In re Lohr*, 137 USPQ 548 (CCPA 1963), and be of a scope reasonably commensurate with the scope of the subject matter claimed, *In re Linder*, 173 USPQ 356 (CCPA 1972). In the instant case, there is no data for the

examiner to evaluate whether such alleged unexpected result is present or not.

Therefore, it is considered that such unexpected benefits are not present.

With regard to the arguments that '969 fails to teach the gel formulation, the examiner notes that the instant rejection is not rely on one reference. Although '969 does not teach the gel formulation, the cited prior art as a whole suggests the hair product to be formulated into various forms including gel.

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to San-ming Hui whose telephone number is (571) 272-0626. The examiner can normally be reached on Mon - Fri from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

San-ming Hui  
Primary Examiner  
Art Unit 1628

/San-ming Hui/  
Primary Examiner, Art Unit 1628